

# CONTENTS

Laterite Developed on Acid Rocks in Southwestern Australia. DOROTHY CARROLL AND NEAL K. JONES.....	1
Use of Radioactive Phosphorus in a Study of the Availability of Phosphorus to Grape Vines under Field Conditions. ALBERT ULRICH, LOUIS JACOBSON, AND ROY OVERSTREET.....	17
Status of Zinc in Relation to Oregon Soil Fertility. W. L. POWERS AND T. S. PANG.....	29
Increases in Nitrogen from Growing Alfalfa on Dry Land. A. F. BRACKEN AND L. H. LARSON.....	37
Effects of Fertilizer and Rootstock on Total Phosphorus Content of Citrus Flowers. A. R. C. HAAS.....	47
Collection and Preservation of Soil Profiles. HENRY W. SMITH AND C. D. MOODIE..	61
Capillary Rise of Moisture in Soil under Field Conditions as Studied by the Electrical Resistance of Plaster of Paris Blocks. GEORGE JOHN BOUYOUCOS.....	71
Books.....	83
Chemical Composition of Some Natal Coastal Dolerites and Their Alteration Products. B. E. BEATER.....	85
A Simple Method of Isolating Bacteria-Free Cultures of Protozoa. M. R. MADHOK AND FAZAL-UD-DIN.....	97
Analyses of Vegetable Fertilizer Plots with a Soil Test Which Measures Acid-Soluble and Adsorbed Phosphorus. CHARLES Y. ARNOLD.....	101
Effect of Various Mulching Materials on Orchard Soils. L. M. TURK AND N. L. PARTRIDGE.....	111
Soil Genesis from a Sedimentary Clay in Trinidad. G. RODRIGUES AND F. HARDY..	127
Some Factors Involved in the Decarboxylation Rate of Uronic Groups of Soil Organic Matter and Pectin. W. H. FULLER, W. V. BARTHOLOMEW, AND A. G. NORMAN..	143
Soil Organic Nitrogen: I. Nature of the Organic Nitrogen in a Muck Soil from Geneva, New York. RUTH T. KOJIMA.....	157
William Horace Ross, 1876-1947.....	167
Factors Influencing Infiltration Rates into Yolo Loam. ARTHUR F. PILLSBURY.....	171
Decarboxylation Rate of Uronic Groups Contained in Soil Organic Matter, Plant Gums of Known Constitution, Plant Materials, and Microbial Products. WALLACE H. FULLER.....	183
Phosphorus-Adsorbing Capacities of Some New Jersey Soils. STEPHEN J. TOTH AND FIRMAN E. BEAR.....	199
Factors Influencing Availability of Plant Nutrients from Synthetic Ion-Exchange Materials. DANIEL I. ARNON AND WILLIAM R. MEAGHER.....	213
Mechanisms of Release of Ions from Soil Particles to Plant. JOHN S. BURD.....	223
Rapid Chemical Soil and Plant Tests. BENJAMIN WOLF AND VERNON ICHISAKA....	227
Soil Organic Nitrogen: II. Some Studies on the Amino Acids of Protein Material in a Muck Soil from Geneva, New York. RUTH T. KOJIMA.....	245
Books.....	253
Soil Conservation and Good Land Use.....	255
Hugh Hammond Bennett.....	257
Development of Our National Program of Soil Conservation. HUGH H. BENNETT...	259
Soil Conservation and Good Land Use in the Northeastern Region. AUSTIN L. PATRICK.....	275
Soil Conservation and Good Land Use in the Southeastern Region. T. S. BUIE....	289
Soil Conservation and Good Land Use in the Upper Mississippi Region. R. H. MUSSER.....	303
Soil Conservation and Good Land Use in the Western Gulf Region. L. P. MERRILL.	315

Soil Conservation and Good Land Use in the Northern Great Plains Region. A. E. McCLYMONDS.....	329
Soil Conservation and Good Land Use in the Southwestern Region. CYRIL LUKER..	341
Soil Conservation and Good Land Use in the Pacific Region. J. H. CHRIST.....	353
Experiments on the Immobilization of Phosphorus Mineral Fertilizers. J. S. PAPADAKIS.....	365
Arsenate-Displaceable Phosphate in Long-Fertilized and Unfertilized Plot Soils. C. J. SCHOLLENBERGER.....	371
Factors Affecting Fixation of Phosphorus in Soils as Determined with Radioactive Phosphorus. J. R. NELLER AND C. L. COMAR.....	379
Mechanical Analysis of Soils by Means of a Common Hydrometer. C. T. CHEN AND M. HUA.....	389
Apparatus for Collecting Undisturbed Soil Samples. J. F. LUTZ.....	399
Investigations on the Separation of Uronides from Soils. W. H. FULLER.....	403
Azotobacter Inoculation of Crops: I. Historical. F. E. ALLISON.....	413
Books.....	431
Influence of Some Cropping and Fertilizing Practices on the Uronides of Soil. W. H. FULLER.....	435
Tropical Soils in Relation to Plant Nutrition. H. W. VAN DER MAREL.....	445
Soil Actinomycetes of Bikini Atoll with Special Reference to Their Antagonistic Properties. DONALD B. JOHNSTONE.....	453
Mycorrhizae and Their Relation to Forest Soils. EDWIN L. SCHMIDT.....	459
Heavy Minerals in Some Podzol Soil Profiles in Michigan. ROY P. MATELSKI AND L. M. TURK.....	469
Azotobacter Inoculation of Crops: II. Effect on Crops Under Greenhouse Conditions. F. E. ALLISON, V. L. GADDY, L. A. PINCK AND W. H. ARMINGER.....	489
Index.....	499

329  
341  
353

365

371

379

389

399

403

413

431

435

445

453

459

469

489

499